

Application No. 09/866,287
Amendment dated November 3, 2005
Reply to Office Action of May 3, 2005

REMARKS

Status Of Application

Claims 33-42 are pending in the application; the status of the claims is as follows:

Claims 33-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,748,277 to Huang et al (“Huang et al”) in view of U.S. Patent No.

35 U.S.C. § 103(a) Rejection

The rejection of claims 33-42 under 35 U.S.C. § 103(a), as being unpatentable over Huang et al in view of Nomura et al, is respectfully traversed based on the following.

Independent claim 33 recites a method for driving a liquid crystal display by applying a plurality of AC pulses to electrodes disposed on either side of a liquid crystal layer, wherein:

“a pulse applied to the selected one of the scan electrodes during the reset step ... has a polarity maintaining period which is longer than that of a pulse applied to the selected one of the scan electrodes during the selection step; and

“a pulse applied to the selected one of the scan electrodes during the evolution step has a polarity maintaining period which is longer than that of the pulse applied to the selected one of the scan electrodes during the selection step....”

That is, claim 33 requires that pulses applied to the same electrode during three different steps of the method have a specified relation. Specifically, the polarity maintaining period of pulses during the reset and evolution steps are longer than that of the pulses during the selection step. It is respectfully submitted that the cited references, taken singly or in combination, fail to disclose, teach, or suggest a method including these features.

Application No. 09/866,287
Amendment dated November 3, 2005
Reply to Office Action of May 3, 2005

At page 3, the Office Action states that Huang fails to teach that a reset pulse has a polarity maintaining period longer than that of a selection pulse, but cites Nomura as teaching this limitation in Figs. 9A and 9B, as well as column 15, lines 20-45. It is respectfully submitted, however, that the cited passage from Nomura does not disclose anything with regard to the polarity maintaining periods of the pulses during the reset or selection steps. The passage merely teaches that additional delay periods, T5, and selection periods, T6, may be used. See column 15, lines 27-34. It is further submitted that the relative lengths of the pulses in Figs. 9A and 9B may not be relied upon because the application does not state that the Figs. are drawn to scale. MPEP 2125. Thus, the combination of Huang and Nomura fails to teach that "a pulse applied to the selected one of the scan electrodes during the reset step ... has a polarity maintaining period which is longer than that of a pulse applied to the selected one of the scan electrodes during the selection step" as required by claim 33. It is respectfully submitted, therefore, that the combination of Huang and Nomura is distinguished by claim 33 as well as by claims 34-37 which depend therefrom.

At page 4, the Office Actions states that Huang discloses that "a pulse applied to the selected one of the scan electrodes during the evolution step has a polarity maintaining period which is longer than that of the pulse applied to the selected one of the scan electrodes during the selection step (sic)."

It is respectfully submitted that this is incorrect. The cited passage from Huang states that after the evolution phase (i.e. to the right of Period 3 in Figs. 5 and 6) on a selected row (scan) electrode, a column voltage applied to the column (signal) electrodes during the selection step of another row electrode also results in a voltage being applied to pixels on the selected scan electrode. This voltage is referred to as crosstalk and it invariably occurs in a liquid crystal display driven by a simple matrix of electrodes. Huang is merely stating that the voltage on the column electrodes must be small enough to prevent or minimize the crosstalk. Indeed, the cited passage in Huang says nothing

Application No. 09/866,287
Amendment dated November 3, 2005
Reply to Office Action of May 3, 2005

whatsoever about the relative lengths of the polarity maintaining periods of the pulses applied to the scan electrodes during the evolution and selection periods.

Moreover, Figs. 5 and 6 clearly show that the polarity maintaining period of a pulse in the selection phase, i.e., period 2, is 1 ms; whereas, the polarity maintaining period of a pulse during the evolution phase, i.e., period 3, is 0.5 ms. Thus, Huang clearly teaches that the polarity maintaining period of a pulse in the evolution phase is *shorter* than during the selection phase. This is the exact opposite of the relationship recited in claim 33. Thus, Huang fails to disclose, teach, or otherwise suggest that "a pulse applied to the selected one of the scan electrodes during the evolution step has a polarity maintaining period which is longer than that of the pulse applied to the selected one of the scan electrodes during the selection step" as required by claim 33. It is respectfully submitted, therefore, that Huang is distinguished by claim 33 as well as by claims 34-37 which depend therefrom.

Accordingly, it is respectfully requested that the rejection of claims 33-42 under 35 U.S.C. § 103(a) as being unpatentable over Huang et al in view of Nomura et al, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

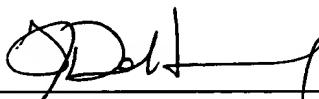
Application No. 09/866,287
Amendment dated November 3, 2005
Reply to Office Action of May 3, 2005

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By:



Michael J. DeHaemer
Registration No. 39,164
Attorney for Applicants

MJD/lb:jkk
SIDLEY AUSTIN BROWN & WOOD LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3335
Main: (214) 981-3300
Facsimile: (214) 981-3400
November 3, 2005

DAI 336768v.3